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ABSTRACT

The use of an observational assessment instrument designed for autistic children is described. The Behavior Rating Instrument for Autistic and other Atypical Children (BRIAAC) measures behavior in eight developmental areas: relationship to an adult, communication, drive for mastery, vocalization and expressive speech, sound and speech reception, social responsiveness, body movement, and psychobiological development. A case study of an autistic child is presented focusing on behavioral change over an 18 month period. Implications for using the BRIAAC and the course of behavioral change in autistic children are discussed. (Author/CL)

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MEASURING CHANGE IN BEHAVIOR IN AUTISTIC CHILDREN THROUGH THE USE OF NATURALISTIC OBSERVATION

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The use of naturalistic observation in assessing autistic children is presented. The assessment tool used is the Behavior Rating Instrument for Autistic and other Atypical Children (BRIAAC), which measures behavior in eight key areas of development: Relationship to an Adult, Communication, Drive for Mastery, Vocalization and Expressive Speech, Sound and Speech Reception, Social Responsiveness, Body Movement and Psychobiological Development. A case study of an autistic child is presented that focuses on behavioral change over an 18 month period. Implications for the use of observational assessment and the course of behavioral change in autistic children is discussed.

ABSTRACT:

The task of measuring behavioral change in autistic and other seriously emotionally disturbed children has gained increasing recognition in the past few years. (Cohen et al, 1978; Provence, 1974; Ruttenberg, 1977).

The recent emphasis on documenting behavioral progress in special children calls for appropriate assessment techniques. Although it is now commonly recognized that autistic children are not "untestable", the method of many of these assessment techniques continues to rely on traditional paper and pencil tasks.

An alternative to formal testing procedures is to observe the child in his or her natural environment. This approach has several advantages. First of all syndromatic characteristics do not confound the assessment results. Autistic children often exhibit a need for sameness and lack of motivation necessary to complete standardized tasks (Rutter, 1974). Naturalistic observation allows the child to tell the observer where he or she is functioning by their behavior in a more secure habitat. Secondly, the results of

observational assessment are not dependent on the childs ability to follow verbal directions.

This paper will briefly describe the use of an observational assessment instrument originally designed for autistic children. A case study will be presented to illustrate how change in behavior may be assessed. Possible interpretations for the course of change in autistic children will be discussed.

The Behavior Rating Instrument for Autistic and Other Atypical Children (BRIAAC), has been developed over a period of 15 years. It has been validated and holds up to tests of inter-rater reliability and test-re-test reliability (Ruttenberg, Kalish, Wenar and Wolf, 1977). Each rater receives intensive training in the use of the BRIAAC and must meet established levels of reliability. The child is observed for approximately an hour and a half in their regular environment (i.e. home, school, clinic). The observation period is arranged to include a variety of situations that the child is normally involved in. (i.e. eating, free play, structured time, play outside).

The BRIAAC consists of eight individual scales. Each scale is made up of ten levels that range from obliviousness to the environment to behaviors characteristic of a normal 3½ - 4 year old. A brief description of each scale is as follows.

RELATIONSHIP TO AN ADULT:

This scale is concerned with the child's response to a significant adult. The lower end of the continuum includes obliviousness, progresses to attendance at a distance, and ends with close physical proximity, sharing of experiences, empathy, and accomodation to the moods of the significant adult.

COMMUNICATION:

The focus of this scale is the child's motivation to communicate. Lack of directed intentional communicative behavior warrants a rating on the

lowest level. Progressing to mid levels, a child makes simple requests, develops regular patterns of approach and rejection, until finally, at the higher levels, he or she can relate past and future events and derives pleasure from communicating with others.

DRIVE FOR MASTERY:

The Drive for Mastery scale measures the childs response to objects. It focuses on the childs growing desire to explore objects rather than specific cognitive skills. On the lower end of the continuum, stereotypy persists and the child has little exploratory interest in newly introduced objects. This disinterest progresses to a fragile attention span, followed by coordinated exploration with increasing interest and attention to tasks. The highest levels reflect the child's increased interest in completing a task and development of the achieving self. Self motivation, goal orientation, and constructive self evaluation emerges.

VOCALIZATION AND EXPRESSIVE SPEECH:

On the lower end of this scale, the child is non-vocal or uses primitive vocalizations, mid levels include musical babbling, echolalia, jargon, one word vocalizations and finally sentences of more than three words.

SOUND AND SPEECH RECEPTION:

As in relationship, the lowest level on this scale is obliviousness, this time time to sound, progressing to attempts to localize and/or repeat sounds, until the child can follow directions without clues from context or gestures.

SOCIAL RESPONSIVENESS:

This scale measures the level of the child's responsiveness to demands from the social environment. The child is observed during eating, toileting, and dressing. At the lower levels, the child remains

passively dependent and often lethargic. Slowly the child is able to comply to social requirements but only when reminded. Higher levels of functioning include the child being conscientious about social functioning and often taking on the role of authority figures in telling other children what to do.

BODY MOVEMENT:

Movement behaviors fall into two classes: Passive and Active. On the low end of the passive scale the child is like a "blob" or "dead weight", the child seems as though he or she is on the verge of action, and movement is creaky and "rusty". On the active scale, the body is rigid, the child has no ability to relax, locomotion has a "driven" quality, and movements are abrupt and disjointed. On the upper end of the scale, both the passive and active children utilize body parts appropriately, have a variety of movements, can recognize themselves in the mirror, and can incorporate fantasy into action, (e.g. enjoys "moving like an elephant").

PSYCHOBIOLOGICAL DEVELOPMENT:

This scale focuses on the childs personality development and his or her ability to modulate drives into socially oriented trait behaviors. The continuum spans the infantile-sensory, oral, anal and phallic stages.

A CASE STUDY

Carl was admitted to the Developmental Center when he was 4 years, 9 months old with a diagnosis of early childhood psychosis with autistic features. The first BRIAAC rating was done prior to admittance in June of 1976. The second rating was done eighteen months later, in October 1977. As can be seen from the interscale profile, significant improvement

(increases of 10 or more points) is evident in all eight areas of development measured by the BRIAAC.

INSERT INTERSCALE PROFILE ABOUT HERE

In 1976, Carl's relationship behaviors gave the impression of a passively resistive child. He exhibited minimal involvement with his mother with fleeting eye contact. However, he also exhibited a strong reaction when his mother would leave the room. This separation resulted in anger and a loss of control over his own actions.

In 1977, Carl showed a consistent searching out for one person. An active relationship had been established and he was able to maintain and initiate physical contact with a primary adult. In addition he was able to anticipate disapproval from the adult and could control his actions accordingly.

Carl's communication behaviors were primarily undirected during the first observation. He vocalized indiscriminantly and sought relief by announcing his distress through crying and screaming. When communication was directed to a particular person it was primarily to fulfill basic needs. By October 1977, Carl regularly approached others for assistance. He had developed the concept of the needful self; that is, he knew what he wanted and whom to approach for help. In addition he was beginning to derive satisfaction from communicating with others.

In 1976, Carl's drive for mastery was typified by brief responses to easily accessible objects with a brief attention span. There was a predominance of more infantile types of exploration such as mouthing. By 1977, Carl was able to maintain a longer attention span and incorporated co-ordinated visual-manual exploration in his play. He also showed signs of pride in his achievements.

Carl's vocalizations progressed from undirected babblings to the development of single word speech with some three word sentences.

Carl's sound and speech reception was originally typified by inconsistent responses to sounds. Although he was aware of sounds and words, he made no attempt to further explore the sources of these sounds. By 1977 Carl exhibited a consistent response to sounds through localizing and repeating sounds he heard. He also understood verbal commands when accompanied by gestures.

Social responsiveness was observed during a "snack" time for both ratings. Carl was aware of the social situation and basic routine in both observation periods. However, in the earlier rating his behavior indicated a need for constant monitoring in eating and remaining at the table. In the later rating he could perform the social function of sitting at a table and eating on his own. He also showed signs of controlled testing out (e.g. sneaking cheese when the adult left the snack area) which demonstrates greater awareness of the situation and the social requirements.

In 1976, Carl's body movements were typified by an overall tenseness and rigidity of his entire body. His whole body would be involved in repetitive movements such as rocking. His movements were quick and jerky showing little ability to relax.

By 1977, Carl was able to relax his body for longer periods of time and the tense rocking had disappeared. He showed a greater awareness of his own movements as in his ability to tease others (i.e. tickling games).

In 1976, Carl's psychobiological development was characterized by driven non-exploratory behaviors. He would rock, mouth objects and had explosive tantrums. By 1977, Carl was much more socially oriented. Instead of rocking idly by himself, he enjoyed musical games that involved

his whole body. He had developed curiosity demonstrated by his scanning of the environment and attention to what was going on around him. He also demonstrated some compulsive behaviors, however, they were integrated into the social environment such as lining up blocks in a particular manner while playing with others.

DISCUSSION:

Although progress in autistic children is generally exceedingly slow, (Wenar et al, 1967), Carl's behavior indicated a great deal of progress over this eighteen month period. The fact that all of the information necessary to make this statement was obtained through naturalistic observation is important. How many times have we heard a mother or teacher respond to test results as not truly indicative of their child's normal behavior? This form of obervational assessment not only allows the child to perform in their most secure environment, but also can be quantified to determine absolute levels of functioning.

It is important to note that these observations are not an isolated set of statements. The BRIAAC is basically a developmental assessment tool. Recent evidence supports the fact that autistic children function on the average, at approximately the level of 12 - 15 month old infants (Fiese, D'Orazio, and Ruttenberg, 1980). By providing a developmental framework to systematic observations we are able to differentiate between regressive and otherwise "hard to handle" behaviors. For example, in 1977, Carl is basically functioning at the level of a two year old. His testing out behaviors in social situations may prove exasperating for the attending adult but indicate a greater awareness on his part and desire to initiate behaviors.

In general, there appear to be several parameters that indicate

progress in an autistic child. First of all, the child is able to consolidate and integrate his or her behaviors. Instead of demonstrating inconsistent and sporadic responses, the child's behavior pattern is marked by a consistency in response to people, sounds, and objects. The progressing child develops individual personality characteristics such as testing out or compulsive routines in play rather than a predominance of stereotypical behavior such as rocking.

As the autistic child progresses, recognizable patterns of approach develop. Instead of vocalizing randomly the child is able to approach specific adults for help and enjoys engaging their attention. The child also begins to initiate contact through physical approaches and non-verbal forms of communication. This is in contrast to a pattern of behavior that is primarily evoked by others. For example, Carl needed to be monitored and reminded to eat in 1976. In 1977, he was carrying out these functions on his own.

In general, as the autistic child progresses he shows an increasing awareness of the expectations of the social environment. This awareness hopefully develops into a desire to become more involved in the social environment.

The parameters and behaviors being discussed are of course not new. We are focusing on key developmental progressions observed in the normal infant. The use of naturalistic observation put into a developmental framework allows for a format of assessment. This form of assessment provides useful descriptive information which may be used to measure change or as a base for program planning. The everyday behaviors of autistic children provides us with a wealth of information. It is our responsibility as sensitive professionals to make use of this information for the benefit of the child.

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BEHAVIOR RATING INSTRUMENT FOR AUTISTIC AND OTHER ATYPICAL CHILDREN

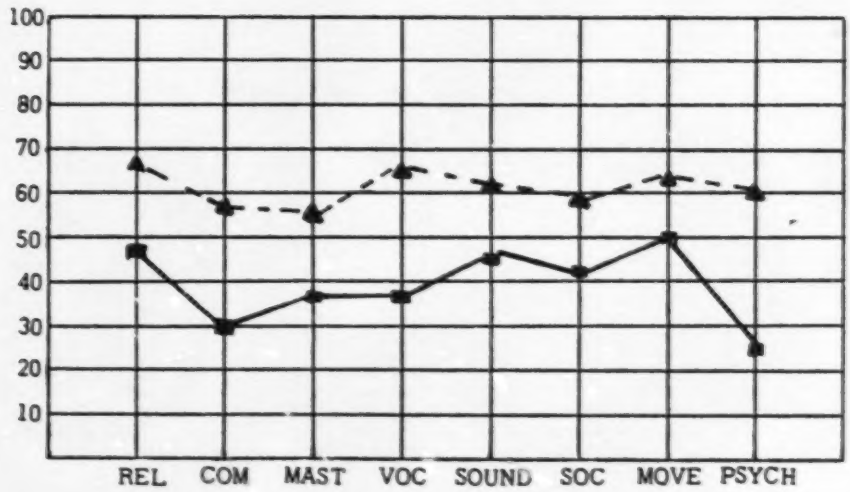
INTERSCALE PROFILE

Child's Name: Carl Birthdate: 10/19/71

Program Developmental Center for Autistic Children

Rating 1 ■——■	Date: 6/76	Rater: ARD
Rating 2 ▲- - - -▲	Date: 10/77	Rater: ARD
Rating 3 ●·····●	Date:	Rater:
Rating 4 ♦-·-·-·-♦	Date:	Rater:

TOTAL SCORES:



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